

Undine's Tears

Suite: Elemental Spirits

by Arya Akhavan (September 2012)

Angles for R.I. = 1.560

51 + 12 girdles = 63 facets

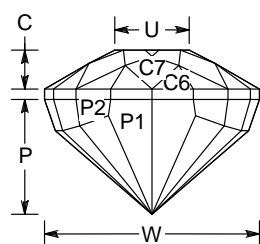
1-fold, mirror-image symmetry

96 index

L/W = 1.557 T/W = 0.597 U/W = 0.346

P/W = 0.535 C/W = 0.181

Vol./W³ = 0.371



PREFORM

X1	41.44°	03-93	Cut to centrepoin (use 03-30-66-93 to generate culet)
X2	42.83°	10-86	Meet culet.
X3	45.04°	16-80	Meet culet.
X4	46.77°	21-75	Meet culet.
X5	48.19°	27-69	Meet culet.
X6	48.70°	32-64	Meet culet (removes X1: 30-66)
G1	90.00°	03-93	Cut level girdle.
G2	90.00°	10-86	Cut level girdle.
G3	90.00°	16-80	Cut level girdle.
G4	90.00°	21-75	Cut level girdle.
G5	90.00°	27-69	Cut level girdle.
G6	90.00°	32-64	Cut level girdle.

PAVILION

P1	41.44°	03-09-15-21-27-33-63-69-75-81-87-93	Cut to centerpoint (remove all CAM facets, including X1)
P2	49.44°	10-86	Level girdle.
P3	58.78°	16-80	Level girdle.
P4	67.06°	21-75	Level girdle.
P5	75.66°	27-69	Level girdle.
P6	80.70°	32-64	Level girdle (P1 will NOT meet girdle @48)

CROWN

C1	50.01°	32-64	Set girdle width.
C2	34.54°	27-69	Level girdle.
C3	34.54°	21-75	Level girdle.
C4	34.54°	16-80	Level girdle.
C5	34.54°	10-86	Level girdle.
C6	34.54°	03-93	Level girdle.
C7	30.37°	96	Meet G1, C6
C8	30.21°	13-83	Meet G2, G3, C4, C5
C9	28.92°	25-71	Meet G4, G5, C2, C3
C10	17.79°	42-54	Meet G6, C1 (C1, C2, C9, C10 do NOT form meetpoint)
C11	9.57°	32-64	Meet C1, C2, C10 (do NOT meet C9)
C12	31.21°	26-70	Meet C1, C10, C11
C13	22.47°	20-76	Meet C3, C4, C8, C9
C14	21.38°	05-91	Meet C5, C6, C7, C8
C15	17.95°	96	Meet C7, C14
T	0.00°	Table	Meet C8, C13, C14

This pear, written for a collection from Secret of Mana, is definitely NOT your standard "marquise with smushed 96 end" outline, and has none of the expected fatness towards the 48. This design has great light return throughout the entire stone. Designed for rich aquamarine, but can be cut in RI = 1.54 - 1.76 with no changes.

Recommended length = 15-20 mm

C:\Program Files (x86)\GemCAD\Designs (Mine)\Undine's Tears.gem